TESCOM™ valves help hydrogen fueling station enhance end-user experience

RESULTS
• Achieved three-minute fill time at the pump thanks to the higher pressure valve
• Improved safety with manual override that includes a 360-degree position-able dome port
• Simplified the system design with products that are interchangeable

APPLICATION
Hydrogen refueling system

CHALLENGE
A major hydrogen refueling company wanted to modify their existing hydrogen refueling system to offer a faster fill rate for customers. The existing valve that regulated the filling station’s hydrogen supply was rated at 8,000 psi and was unable to meet the new system’s fill-time goal. The company also required a system with a compact design and a manual override capability for safety purposes.

SOLUTION
The company chose the Tescom VG Series valve for the hydrogen refueling station since its 15,000-psi pressure rating allowed customers to fill their tanks in three minutes. This fill time exceeded the project’s goal and significantly enhanced the end-user experience. The valve’s manual override with safety pin enabled quick system shutoff and satisfied the application’s safety requirements. In addition, the VG Series’ compact construction was interchangeable with the previous model and was compatible with existing connections. Plus, its 360-degree dome port allowed the customer to pipe the valve at any position. These features simplified system design and facilitated installation.